

UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF NEW YORK

x

RAYMOND ANTHONY JOAO, and
ROBERT RICHARD BOCK,

Plaintiffs,

-against-

03 Civ. 10199 (CM)(MDF)

SLEEPY HOLLOW BANK and
JACK HENRY & ASSOCIATES, INC.

Defendants.

x

SECOND DECISION CONSTRUING DISPUTED CLAIM TERMS
(Markman Decision)

I. Introduction

This is the second Markman opinion to issue in this case.

The patent in suit, Number 6,529,725 (“The ‘725 Patent”) was issued to plaintiffs Raymond Joao and Robert R. Bock on March 3, 2003, based on an October 9, 1998 application. It describes a “Transaction Security Apparatus and Method” – a protocol and apparatus that protect personal financial assets, such as bank accounts or lines of credit, from fraudulent activity. The invention consists of several devices, linked by communications networks, which operate together to notify an individual when their bank account or credit line is being debited, and allow the individual to cancel a transaction perceived to be fraudulent before it is processed.

Defendants Jack Henry & Associates and Sleepy Hollow Bank are the developer and licensee, respectively, of a software product which permits online stop-payment actions on checks and other bank drafts. Plaintiffs content that some fifty-six of the three hundred and forty

claims in the '725 Patent read on defendants' technology.

I issued the first Markman opinion in this case on November 30, 2004. See Joao v. Sleepy Hollow Bank, 348 F. Supp. 2d 120 (S.D.N.Y. 2004) (hereinafter, Joao I). In that opinion, I addressed seven contested terms within the '725 Patent. The parties now return with a second set of contested terms.

The function of construing the claims of a patent in suit has resided with the Court since the Federal Circuit decided, in Markman v. Westview Instruments, Inc., 52 F.3d 967, 978-79 (Fed. Cir. 1995), *aff'd* 517 U.S. 370 (1996), that the construction of a patent was a question of law for a judge, not one of fact for a jury. Only after the court construes the claims in the patent can the parties proceed to adjudicate the merits issues of validity and infringement.

The form a Markman hearing takes lies in the sound discretion of the Court. See, e.g., Rubie's Costume, Co. v. Disguise, Inc., No. 99 Civ. 3189 (AGS), 2000 U.S. Dist. LEXIS 8657, * 1-2 (S.D.N.Y. June 20, 2000). The parties first submitted twenty-two terms for consideration, but since have narrowed the list to seven. I thank the parties for the preparation of their extremely helpful Joint Second Markman Claim Construction Statement.

II. Principles of Claim Construction

Certain principles that are deeply embedded in patent law guide the court in claim construction.

The meaning of a claim should be interpreted in light of the intrinsic evidence, comprised of the claims and the specification of the patent, and the prosecution history. Markman, 52 F.3d at 979. The intrinsic evidence constitutes the public record of the patent on which the public is

entitled to rely. Id. Thus, if the intrinsic evidence is sufficient to resolve the meaning of a disputed term, it is improper to resort to extrinsic evidence, such as expert testimony or treatises. Vitronics Corp. v. Conceptronic, Inc., 90 F.3d 1576, 1583 (Fed. Cir. 1996). Extrinsic evidence only should be relied upon where necessary to resolve an ambiguity in a disputed claim term. CVI/Beta Ventures, Inc. v. Tura, L.P., 112 F.3d 1146, 1153 (Fed. Cir. 1997).

To define the scope of the patented invention, the Court must first look at the words of the claims themselves. Vitronics Corp., 90 F.3d at 1582 (citing Bell Commc'ns Research, Inc. v. Vitalink Commc'ns Corp., 55 F.3d 615, 620 (Fed. Cir. 1995)). Words in the claim are generally given their ordinary and customary meaning. However, “a patentee may choose to be his own lexicographer” and assign special definitions to the words in the claim, as long as those definitions are clearly stated in the patent specification or file history. Id. (citing Hoechst Celanese Corp. v. BP Chems. Ltd., 78 F.3d 1575, 1578 (Fed. Cir. 1996)). Therefore, “it is always necessary to review the specification to determine whether the inventor has used any terms in a manner inconsistent with their ordinary meaning. The specification acts as a dictionary when it expressly defines terms used in the claims or when it defines terms by implication.” Id. (citing Markman, 52 F.3d at 979). The Federal Circuit has stated that “claims must be read in view of the specification, of which they are a part.” Id. (citing Markman, 52 F.3d at 979); see also Gart v. Logitech, Inc., 254 F.3d 1334, 1341 (Fed. Cir. 2001) (“it is certainly correct that the specification and the prosecution history should be consulted to construe the language of the claims.”). Because the specification must contain a description sufficient to enable those of ordinary skill in the art to make and use the invention, the specification “is the single best guide to the meaning of a disputed claim term.” Id.

The court also may consider the prosecution history of the patent. Id. (citing Markman, 52 F.3d at 980; Graham v. John Deere, 383 U.S. 1, 33 (1966)). The prosecution history is the complete record of the proceedings before the Patent and Trademark Office. During the course of these proceedings, the applicant may have made express representations regarding the scope of the invention, so the prosecution history is “often of critical significance to determining the meaning of the claims. Id. (citing Markman, 52 F.3d at 980; Southwall Tech., Inc. v. Cardinal IG Co., 54 F.3d 1570, 1576 (Fed. Cir. 1995)). Claim terms may appear to contain plain language. However, the prosecution history may demonstrate that the claims do not cover some matters that would otherwise be encompassed in the plain meaning of the words used.

Prosecution histories often contain an analysis of the distinctions between the prior art and the applicant’s claims, providing the Court with clues to limitations of the claims. Id. at 1583; Autogiro Co. of America v. United States, 384 F.2d 391, 399 (Ct. Cl. 1967). Furthermore, “the prosecution history limits the interpretation of claim terms so as to exclude any interpretation that was disclaimed during prosecution.” Southwall Tech., Inc., 54 F.3d at 1576. Even when the written description would otherwise support a construction, the prosecution history, which is generated afterwards, can relinquish coverage of that claimed embodiment. Rheox, Inc. v. Entact, 276 F.3d 1319, 1325-27 (Fed. Cir. 2002).

Finally, claim language should be read in a manner that causes the claim to make sense. Courts are to construe claims so as to sustain a patent’s validity where possible. ACS Hosp. Sys., Inc. v. Montefiore Hosp., 732 F.2d 1572, 1577 (Fed. Cir. 1984).

Defendants draw the Court’s attention to two recent cases, Nystrom v. TREX Co., Inc., 424 F.3d 1136 (Fed. Cir. 2005) and Aquatex Indus., Inc. v. Techniche Solutions, 419 F.3d 1374

(Fed. Cir. 2005). In these cases, the Federal Circuit reminded district courts that we should not place “undue reliance on extrinsic evidence... to change the meaning of claims in derogation of the indisputable public records consisting of the claims, the specification, and the prosecution history.” Nystrom, 424 F.3d at 1143 (quoting Southwall Techs., Inc. v. Cardinal IG Co., 54 F.3d 1570, 1578 (Fed. Cir.1995)). In other words, these cases reinforce, rather than depart from, the rules of claim construction set out in Vitronics Corp., Graham, and Gart in instructing this Court not to look to extrinsic evidence such as dictionaries where the patent and its prosecution history provide sufficient guidance.

III. Construction of Disputed Claims

A. “Authorization Request”

I adopt the following definition: “a query sent to the central processing computer via a communications medium, seeking approval or disapproval of a transaction or activity.”

“Authorization request” appears in two claims-in-suit, 87 and 94.

Defendants offer the following: “a query seeking approval or disapproval of a banking transaction, the query being sent from a banking transaction terminal over a communications medium to the central processing computer for processing the query.” Plaintiffs suggest, “an asking for an approval or an allowance of or regarding a transaction or an activity.”

At first glance, plaintiffs’ definition should be sufficient. “Authorization” and “request” are easily understood terms, both on their own and in connection with the commercial practice of seeking approval from some third party before completing a credit transaction. One might assume that any query “asking for approval... of a transaction,” regardless of its source or

destination, would constitute such a request.

However, as defendants correctly argue, the patent limits the definition beyond the plain meaning of the words. Many transmissions discussed in the patent may be queries for some kind of approval – a vendor device may contact a central processing device or the account holder directly; the central processing device may contact the account holder; etc. However, the phrase “authorization request” as used in the patent refers only to communications between a vendor device and the central processing device.¹ In the second claim, for example, in which the central processing computer is bypassed and a message to the account holder is sent directly from the transaction processing device at the vendor location, the message is not referred to as an “authorization request,” but only as a “first signal.” ‘725 Patent, col. 44:58 – 45:14. Therefore, I conclude that an authentication request is a request for approval by the vendor (or the bank, if we are talking about an ATM transaction) that terminates at the central processing computer.

This limitation makes sense in light of what we know about the invention itself. The claims make it clear that the central processing device, not the account holder, either authorizes or blocks a transaction. Its decision may be based on its own internal database of rules or, if the invention works, it may be based on information received from the account holder. Therefore, a request from the central processing computer to the account holder concerning a transaction is not an “authorization request.”

However, defendants are incorrect in asserting that the request must originate at a “banking transaction terminal” or be limited to requests concerning banking transactions. I have

¹The authorization request may pass through other computer systems in transit to the central processing device. See ‘725 Patent, col. 21:32-38.

previously defined a “banking transaction” as, “An activity affecting a deposit account, such as a deposit of funds or a withdrawal” Joao I, 348 F. Supp. 2d at 130. Therefore a banking transaction terminal is a device which engages in activity affecting a deposit account.

The description of the invention, as well as the preferred embodiments, make it plain that authorization requests can be generated by a credit or debit card authorization device (‘725 Patent, col. 46:63-65); a smart card authorization device, (Id., col. 47:1-2), a “point-of-sale” transaction (Id., col. 47:4-6) or a cellular telephone (Id., col. 29:10-24). Claim 94 states that the authorization request may originate at “a point-of-sale authorization device, a point-of-sale authorization terminal, and a transaction authorization device.” Id., col. 55:15-18. None of these devices necessarily affect deposit accounts. Therefore, the patent does not limit “authorization requests” to those generated specifically by “banking transaction terminals,” or limited to those seeking authorization for banking transactions.

Striking unnecessary language from defendants’ definition, I adopt the following phrase: “a query sent to the central processing computer via a communications medium, seeking approval or disapproval of a transaction or activity.” That is the definition I adopt.

B “Electronic Mail Message”

I adopt the following definition: “A digital text message that is sent over a communications network from one device to another.”

Plaintiffs offer, “A message sent and received electronically.” Defendants offer, “A letter or memo or other text message sent through a communication network from one computer to another.”

Both parties use the word “message” in their definition of “electronic mail message,” and neither defines it. I assume from this that the parties take the position that “message” need not be construed. I agree, and so decline to construe that word.

Electronic mail is one of the many forms of communication that may be used to transmit a signal from the central processing unit to the holder of the account, notifying the holder of the transaction and seeking authorization. The patentee clearly intended that the invention be compatible with any and every sort of device through which a message could be conveyed to the holder, and with every medium for the transmission of information. Indeed, the patentee lists “electronic mail message” among a number of types of information transmissions:

The signal utilized could be in the form of a communication transmission, depending on the communication medium utilized, a telephone call, a voice message, a beeper and/or a pager message, an **electronic mail message**, a fax transmission, and/or any other mode of communication which may be utilized with any of the apparatuses, devices and/or components described herein...”

‘725 Patent, col. 10: 45-52 (Emphasis added). The apparatuses, devices and components described herein included in the patentee’s definition of “cardholder (or account holder) communications device” include landline and cellular telephones, beepers, pagers, fax machines, personal computers, answering machines, PDAs or handheld devices, and any other apparatus that communicates via “telecommunication systems, satellite communications systems, radio communications systems, digital satellite communications systems, personal communications services communications systems” and “any other appropriate communications system.” (‘725 Patent, col. 4:39-44).

The list of communications devices is intended to be exhaustive and anticipatory. The patentee obviously understood that rapid advances in the electronics industry had the potential to

render existing means of communications obsolete and drafted the patent so that the invention was not dependent on the use of any particular type of communications device. it

The term “electronic mail message” (or e-mail message) has a common non-technical meaning to the user of these various communications device. The term as used colloquially means a readable (text) message that is sent to a communications device. E-mail messages are commonly understood to be “electronic letters” – that is, they deliver the message in readable form, rather than via sound or video. And they are sent from device to device. These devices are generally computers, but these days they can also be PDAs (Blackberry being the obvious example) or cellular telephones that have a text messaging feature. They are sent and received digitally, rather than in analog form. Electronic mail messages are not beeps or pages; they are not voicemails or messages left on telephone machines; they are not faxes. You know them when you see them.

The breadth of the patentee’s definition of “communications system” and “communications transmission” suggests that “electronic mail message” as used in the claims in suit ought to be understood in its colloquial sense, as opposed to some technical sense.

That being so, I see no reason why I should not define “electronic mail messages,” in accordance with its commonly-understood meaning: “A digital text message that is sent over an communications network from one device to another.”

There is absolutely no indication that the patentee intended any particular technical meaning for the term “electronic mail message” in the patent, or that he did not intend the term to have its ordinary, colloquial meaning. I see no need to resort to technical dictionaries to define this term, since its meaning is readily apparent from the language used in the patent to describe

the invention.

Plaintiffs' proposed definition, "a message sent and received electronically," is far too broad, since it would encompass messages sent via pagers and voice mail as well as electronic text messages.

C. "Real Time," (or "Real-Time," or "In Real Time")

I adopt the following definition: "at the same time that a transaction is taking place."

"Real-time," as used in the patent, can be either an adjective, as in "real-time monitoring" ('725 Patent, col. 20:31), or a noun within an adverbial phrase, as in "enables a cardholder to monitor, in real time, activity involving his or her card(s)" (*Id.*, col 20:33-34). The patent also uses the phrases "in real-time" and "in real time" (no hyphen) interchangeably.

Plaintiffs offer the following four definitions: "immediately, or instantaneously, or at once, or at the actual time as something takes place." These four definitions are derived from different definitions of "real time" in standard English dictionaries. Defendants offer the definition, "simultaneously with the execution of the banking transaction."

"Real-time" has a technical definition, meaning a program that operates within a brief interval of time. When the term was coined, it was used to describe computer systems which had to work reliably within a pre-defined time interval, usually a matter of milliseconds, such as anti-lock braking systems in cars. However, it is clear from the patent that the drafters did not intend the technical definition. The invention does not impose any actual time limits, absolute or relative, on how long the transaction security protocol takes. Therefore, I must look to some

other definition of the term.

“Immediately,” “instantaneously,” and “at once” are essentially synonymous, meaning without perceptible duration or interval of time. Merriam-Webster Online Dictionary *at* <http://www.m-w.com/dictionary/instantaneous>. However, “at the actual time as something takes place” – plaintiff’s fourth proposal – is not the same as “immediately” – there may be a small, barely perceptible delay of time between the inception of a transaction and subsequent notification, although notification could still occur before the transaction concluded.

“Immediately” (or “instantaneously,” or “at once”) also does not reflect the speed at which a system processes real-time notifications. A *slow* central processing computer may nevertheless provide real-time information, if the information provided is current as of the time the request is made and processed. The patentee could not have intended to limit their invention to systems in which such notification must be *instantaneous*; otherwise, one could design around the patent by building a system which imposes a delay of a few seconds before issuing the warning.

The phrase offered by defendants – “simultaneously with the execution of the banking transaction” – is fine, except that I would eliminate the word “banking” (since the invention was clearly intended to extend beyond banking transactions). According the Merriam-Webster Online dictionary, “simultaneous” means “existing or occurring at the same time.” As I understand the invention, the monitoring and notification of the account holder are designed to take place after the transaction begins but before it ends, so that the holder has an opportunity to stop the transaction before it is concluded. Thus, notification in real time is notification that occurs at the same time as (simultaneously with) the transaction.

D. “Central Processing Computer”²

I adopt the following definition: “a device that receives, processes, and presents data by having, interconnected for operation, at least a central processing device and a memory device.”

Plaintiffs offer “a device or computer which can perform an operation, action, or function, or a device or computer which can perform more than one operations, actions, or functions [sic].”³ Given that a computer is a device, plaintiffs’ definition seems to reduce to: “a device which can perform one or more operations, actions, or functions.” That definition is so broad as to encompass many manufactured items.

Defendants put forward:

a device that receives, processes, and presents data by having, interconnected for operation, a memory device and at least one user input and one user output device and containing the circuits required to interpret and execute instructions.

The language of the claims makes plain that the central processing computer is the computer that collects data from the various point-of-sale devices, banking transaction terminals, customer communications devices, etc. It is the pivot point between the service provider and the account holder, and so is in the middle of – “central” to – the apparatus.⁴

² In the first Markman opinion, I had to construe the term “central processing device,” which I defined as, “That part of a computer containing the circuits required to interpret and execute instructions.” I cannot extrapolate from that definition to this one, because a “Central processing device” (more commonly known as a central processing unit, or CPU) is but one component of a computer. A “central processing *computer*” would have to contain a central processing device (or unit) and other components as well.

³Plaintiffs seem to believe that the word “processing” somehow modifies “computer.” But that is what computers do – they process information. The phrase “processing computer” is inherently redundant – it would be like saying “heating oven.”

⁴The patent at various times uses the phrase “central transaction processing computer.” See, e.g., ‘725 Patent, Col. 44:67. These two phrases appear to be synonymous.

Neither the description of the invention, nor the claim language, nor the preferred embodiments, nor the prosecution history imposes any limitation on the type or nature of computer that can perform the “central processing computer” function. In fact, the patent places virtually no restrictions on the type of device that the central processing computer could be: “[it] may be a mainframe computer, a mini-computer, a micro-computer, a server computer... and/or any other suitable computer or computer system.” ‘725 Patent, Col. 22:24-29.

Defendants’ definition is closer to being correct, but includes some unnecessary limitations. There is no need for a “user input and “user output” (I/O) device on the computer; a server or mainframe computer (which may be a central processing computer according to the patent itself) do not necessarily have components beyond a processor and memory. Of course, for the protocol to *work*, the central processing computer must be connected to a communications network, but that fact is adequately stated in the claims themselves. Therefore, removing the references to input and output devices, and replacing the phrase “containing the circuits required to interpret and execute instructions” with the phrase “central processing device,” I reach the following definition: “device that receives, processes, and presents data by having, interconnected for operation, at least a central processing device and a memory device.”

E. “Network Computer”

The phrase “network computer” appears in many of the claims of the ‘725 patent. It is not defined, however, nor is there any means of discerning a definition from context.

However, the words “network computer” never appear alone in the claims. Rather, the phrase is always part of a list of possible client-end communications devices: “facsimile (fax) machine, personal computer, telephone, telephone answering machine, alternate telephone, alternate telephone answering machine, **network computer**, and/or alternate beeper or pager.” ‘725 Patent, col. 40:47-52 (Emphasis added.)

Plaintiffs offer the following definition:

a device or computer which can receive a signal, data, information, or a message from another device or computer in or via a communication network, or device or computer which can transmit a signal, data, information, or a message to another device or computer in or via a communication network.

In essence, plaintiffs amalgamate the definitions of “computer” and “network.” Such a definition is appealing. Unfortunately, it cannot be squared with the use of the phrase “network computer” within the claims.

First, a “network computer,” as well as all the other items in the list, are devices that are, by the terms of the claims themselves, attached to a communications network. Therefore, if I were to adopt plaintiffs’ proposed definition, the word “network” would be superfluous.

Second, the phrase “personal computer” is included in the list of client-end communications devices. So a network computer must be something different than a personal computer. But a personal computer can send and receive data over a network. The personal computer on which I am typing this opinion is attached to a network and is both sending data (including this opinion) and receiving data over that network. This means plaintiffs’ proposed

definition is far too broad – because it encompasses personal computers that are attached to networks – and so must be rejected.

Defendants’ definition, culled from various web sites and online glossaries (i.e., from extrinsic evidence), is as follows:

a computer with minimal memory, disk storage and processor power designed to connect to a network server, especially the Internet; a type of thin client designed to connect to a network, especially the Internet. This computer system stores data and applications on a network server, from where it obtains or downloads them.

Defendants argue that the phrase “network computer” had a well-established definition at the time the patent was drafted and would have been understood by one skilled in the art to conform to the definitions found in the various extrinsic sources it cites. Network computers were a low-cost alternative to the personal computer, one that would download programs for personal use but would not store those programs. Needless to say, the market for such devices never materialized. I am not aware that the term was ever much used by people like me and other computer users.

If defendants are correct that a person skilled in the art would understand the term “network computer” to refer to a dinosaur product (and the argument seems persuasive), then it seems a shame to spend a lot of time, energy, and client funds defining the term. However, I fear I must. Since I cannot arrive at any definition of the term from evidence that is intrinsic to the patent, I will have to (for the first time in any case) proceed to a Phase 2 Markman hearing. Plaintiffs and defendants have 30 days from the date of this opinion to submit extrinsic evidence (including expert affidavits) on the meaning of this term. I will supplement this opinion after reviewing that evidence.

F. “The normal operation . . . is interrupted to convey”

I adopt the following definition, based on the plain meaning of the words in the phrase: “the regular, standard, or natural function or working... is stopped so that it can be resumed at a later time, in order to convey...”

In several claims, the patent purports to describe a method of notifying an account holder about a pending transaction, not via direct communication over a telephone or computer network, but rather through some form of broadcast medium such as a “television, radio, car radio, computer, etc.” ‘725 Patent, Col. 41:35-37. Such a transmission would reach the television, radio, or other device and “interrupt” its “normal operation” to convey the message which the Central Processing Computer wished to send (presumably, a message that the holder’s account was being debited).

This phrase is not defined in the patent, and neither party suggests that these words are a term of art in any industry related to the invention. The phrase describes a process by which any one of a list of common broadcast devices – a “television, radio, car radio, computer, etc.” – can be used to notify the end user of a transaction involving their account. It is common knowledge that such consumer devices communicate over a number of broadcast media: radio waves, television signals, computer networks, cable networks, satellite communications, and so forth. Since the patent does not specify *how* this process of interrupting a broadcast would work technically, I conclude that the phrase does not have a technical meaning, but rather embraces any means of interrupting a broadcast signal.

Defendants offer:

the standard functioning of the communications device is suspended while the information and/or message to the account holder of the signal being sent to the

communications device is substituted for the functioning of the communications device simultaneously with the execution of the transaction by the central processor or upon the occurrence of the triggering event.

I would have to reject that definition simply because it is overly cumbersome and redundant. For example, they include a requirement that an interruption take place “simultaneously with the execution of the transaction... or upon the occurrence of the triggering event,” although neither the plain meaning of the words nor their context imposes such a requirement.

Plaintiffs offer:

The regular, standard, or natural function or working... is disrupted, the normal flow of the operation is broken and can be resumed at a later time or is stopped so that it can be resumed, in order to convey...

This definition is far more direct. The parties seem to agree that “normal operation” means the standard functioning of the device. They further agree that the word “convey” does not need to be construed.

Plaintiffs’ unwieldy interpretation of “interrupted,” – “is disrupted, the normal flow of the operation is broken and can be resumed at a later time or is stopped so that it can be resumed” – is overly verbose, and is apparently based on a technical definition of the word “interrupt” from the world of computer science. The phrase, “stopped so that it can be resumed at a later time” is sufficient.

Therefore, “the regular, standard, or natural function or working... is stopped so that it can be resumed at a later time, in order to convey...” is the definition I adopt.


G “Banking Transaction Terminal”

Defendants ask this Court to define the phrase “Banking Transaction Terminal.” As plaintiffs correctly argue, the term is not contained within any of the claims in suit. Nor, given my ruling in § II.B above, is the term required to define any other term in the ‘725 Patent. Defendants have offered no other reason for me to address this term.

Therefore, I decline to do so.

This constitutes the decision of this Court.

Dated: March 3, 2006

A handwritten signature in black ink, appearing to be "Colleen M. McKee", written over a horizontal line.

U.S.D.J.